THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today

(1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 11

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS

AND INTERFERENCES

Ex parte Allan W. Rey,
Purushotham Vemishetti,
and Roberto Droghini

Appeal No. 97-2168 Application No. $08/382,120^{1}$

ON BRIEF

Before WINTERS, WILLIAM F. SMITH, and LORIN, Administrative Patent Judges.

LORIN, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed January 10, 1995. According to appellants, this application is a division of Application 08/165,610, filed December 13, 1993, now U.S. Patent 5,412,092,issued May 2, 1995, which is a continuation-in-part of Application 08/052,434, filed April 23, 1993, now abandoned.

This is an appeal under 35 U.S.C. § 134 from the final

rejection of claims 10-12, 21 and 33, all the claims pending in the application. Claims 33 is illustrative of the subject matter on appeal and reads as follows:

A method for preparing a compound having the formula

Wherein R^1 is selected from the group consisting of: alkyl, halo-substituted alkyl, cycloalkyl, arylalkyl and groups derived from carbohydrates containing a pyranosyl or furanosyl ring; X is selected from 0, N, S, C(0)0 and a direct bond; R^2 is selected from the group consisting of aryl, substituted aryl, and mono- or bicyclic aromatic groups having five to six atoms in each ring; and "substituted aryl" means an aryl group bearing from one to three same or different substituents selected from the

group C_{1-3} alkyl, C_{1-3} alkoxy, hydroxy, trifluoromethyl and halogen, which process comprises subjecting a compound of formula I to catalytic hydrogenolysis:

$$R^{1}X$$
 R^{2}
 O
 $CH-N=CHR^{2}$
 R^{2}
 R^{2}

Claims 10-12, 21 and 33 are rejected under 35 U.S.C. § 112, first and second paragraphs. We reverse and make a new ground of rejection under 37 CFR § 1.196(b).

The examiner has rejected the claims as indefinite because claim 33 contains the following two phrases (examiner's answer, pp. 2 and 5):

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"groups derived from carbohydrates containing a pyranosyl or furanosyl ring", and,

"mono- or bicyclic aromatic groups having 5 to 6 atoms in each ring".

The inquiry under the second paragraph of § 112 is whether the claims particularly point out and distinctly claim what appellants consider as their invention. This is essentially a requirement for precision and definiteness of claim language. In addressing this requirement, with respect to the two phrases, the examiner states that

- "Because of the vagueness of 'derived from' it is unclear what does or does not fall within the R¹ definition" (examiner's answer, p. 2, lines 19-20), and
- "'mono- or bicyclic aromatic groups having 5 to 6 atoms in each ring'. . . is [also] indefinite, in that it introduces the open ended 'groups', which is open ended as to any substituents which might be present" (specification, p. 5, lines 17-21).

The "definiteness of the language employed must be analyzed - not in a vacuum, but always in light of the

teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art." <u>In re Moore</u>, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971). The specification not only refers to "groups derived from carbohydrates containing a pyranosyl or furanosyl ring" in defining carbohydrate derivatives but provides examples (specification, p. 4, lines 33-36). One of these derivatives is used in Example 25 (p. 35, lines 28-29) to illustrate the invention. In light of this, the recitation "derived from" is sufficiently defined. While it is true that this term gives the claims considerable breadth, breadth is not synonymous with indefiniteness. See In re Gardner, 427 F.2d 786, 166 USPQ 138 (CCPA 1970). Regarding the use of the term "groups", when read in the context of the entire phrase, and in view of the examples recited in the specification (e.g., page 4, lines 29-32), the "groups" are those which are mono- or bicyclic aromatic and have 5 or 6 atoms in

each ring. The "word . . . has a reasonably precise meaning and therefore does not render the claims indefinite." In re Wakefield, 422 F.2d 897, 904, 164 USPQ 636, 642 (CCPA 1970). With respect to substituents, this may give the claims considerable breadth, but again breadth is not synonymous with indefiniteness.

We therefore reverse the rejection under 35 U.S.C. § 112, second paragraph.

The examiner has also rejected claims 10, 12, 21 and 33 under 35 U.S.C. § 112, first paragraph "for lack of support" (examiner's answer, p. 5, line 14). The examiner states:

"The original language of 'heteroaryl' was replaced by the broader phrase 'mono- or bicyclic aromatic groups having 5 to 6 atoms in each ring'. This specific phrase (which does not appear in the specification) is <u>broader</u> than 'heteroaryl' in that it doesn't require that a heteroatom be present" (examiner's answer, p. 5 lines 16-20).

In fact, literal support for the phrase can be found in the specification at p. 4, lines 29-30. The problem with this phrase is not a matter of written descriptive support, therefore, but rather one of "distinctly claiming the subject matter which the applicant regards as his invention", 35 U.S.C. § 112. We will address that below. The rejection under § 112, first paragraph is reversed.

New Ground of Rejection under 37 CFR § 1.196(b)

Under the provisions of 37 CFR § 1.196(b), we make the following new grounds of rejection.

Claims 10, 12, 21 and 33 are rejected under 35
U.S.C. § 112, second paragraph, as being indefinite. As we see it, claim 33 is incomplete. The examiner originally rejected the claims under § 112, second paragraph, on the grounds that "heteroaryl" was self-contradictory (first Office action, mailed November 9,

1995). In response, appellants amended the claims so that "'heteroaryl' [has] been clarified using the recitations found at . . . page 4, lines 28+" (appellants' Response filed December 1, 1995, p. 4). However, the phrase that was inserted in the claims -"mono- or bicyclic aromatic groups having five or six atoms in each ring" - is not the full recitation found in the specification. It is missing the important additional criterion "and having at least one ring heteroatom selected from nitrogen, sulfur and oxygen" (page 4, lines 28-32). Without this limitation, the claims do not distinctly claim the subject matter which appellants regard as their invention. We are not persuaded that the recitation, in its currently shortened form, further describes the claimed term "aryl", as appellants appear to suggest (brief, p. 7^2). The term

[&]quot;The 'open-ended' nature of groups is unclear. At page 4, lines 17-19, appellants state that '[a]ryl' means a mono- or bicyclic aromatic carbocyclic group. Since 'carbocyclic' refers to moieties containing only carbon and hydrogen, the term 'aromatic groups' - if read in light of the

"aryl" has a common³ and definite⁴ meaning which the specification does not controvert and that meaning does not include groups with only 5-membered carbocyclic rings. It is clear that R² is defined as "selected from the group consisting of aryl, substituted aryl, and heteroaryl" (specification, p. 3, lines 23-24) but that is not how the claims now read. The inconsistency should be clarified. This can be accomplished, and this rejection overcome, by inserting the aforementioned missing recitation.

specification - cannot be 'open-ended'."

³ See the definitions of "aryl" set forth by the authorities listed in footnote 3 of <u>In re Sus</u>, 306 F.2d 494, 498, 134 USPQ 301, 304 (CCPA 1962).

[&]quot;Irrespective of whether the term 'aryl' is restricted to an organic radical derived from an aromatic hydrocarbon by the removal of one atom; e.g., phenyl from benzene, or could be read as inclusive of the tolyl radical ($CH_3C_6H_4M$), it is believed apparent that the claims' use of the three terms 'aryl', aralkyl' and alkaryl' clearly indicates the intended scope of the substituent groups." Ex parte Scherberich, 201 USPQ 397 (BPAI 1977).

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that "[a] new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

Request that the application be

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Reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR $\S 1.136(a)$.

REVERSED - 37 CFR § 1.196(b)

SHERMAN D. WINTERS)	
Administrative Patent	Judge)	
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)	BOARD OF PATENT
WILLIAM F. SMITH)	APPEALS
Administrative Patent	Judge)	AND
)	INTERFERENCES
)	
)	
)	
HUBERT C. LORIN)	
Administrative Patent	Judge)	

HCL/dal

SANDRA M. NOLAN
BRISTOL-MYERS SQUIBB CO.
5 RESEARCH PARKWAY
WALLINGFORD, CT 06492